SANTA CRUZ BIOTECHNOLOGY, INC.

NYD-SP15 (3C8): sc-81998



BACKGROUND

NYD-SP15 (testis development protein NYD-SP15), also known as CDADC1 (cytidine and dCMP deaminase domain containing 1), is a widely expressed protein with predominant expression in the testis, liver, spleen, kidney, thymus and placenta. NYD-SP15 is 514 amino acids in length and belongs to the cytidine and deoxycytidylate deaminase family. It is developmentally regulated, with higher expression in adult testis than fetal testis, and is believed to participate in spermatogenesis and testicular development. This suggests that NYD-SP15 may be a determining factor in male infertility. Due to alternative splicing events, four transcript variants exist for NYD-SP15.

REFERENCES

- 1. Tiazhelova, T.V., et al. 2004. Search for transcribed segments in the region of q14.3 of human chromosome 13 in silico. Genetika 40: 422-426.
- 2. Toshimitsu, H., et al. 2006. Molecular features linked to the growthinhibitory effects of gemcitabine on human pancreatic cancer cells. Oncol. Rep. 16: 1285-1291.
- 3. Liu, Q., et al. 2006. NYD-SP15: a novel gene potentially involved in regulating testicular development and spermatogenesis. Biochem. Genet. 44: 409-423.

CHROMOSOMAL LOCATION

Genetic locus: CDADC1 (human) mapping to 13q14.2; Cdadc1 (mouse) mapping to 14 D1.

SOURCE

NYD-SP15 (3C8) is a mouse monoclonal antibody raised against recombinant NYD-SP15 of human origin.

PRODUCT

Each vial contains 100 μg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NYD-SP15 (3C8) is recommended for detection of NYD-SP15 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NYD-SP15 siRNA (h): sc-75986, NYD-SP15 siRNA (m): sc-150136, NYD-SP15 shRNA Plasmid (h): sc-75986-SH, NYD-SP15 shRNA Plasmid (m): sc-150136-SH, NYD-SP15 shRNA (h) Lentiviral Particles: sc-75986-V and NYD-SP15 shRNA (m) Lentiviral Particles: sc-150136-V.

Molecular Weight of NYD-SP15: 58 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA





NYD-SP15 (3C8): sc-81998. Western blot analysis of NYD-SP15 expression in RAW 264.7 whole cell lysate. NYD-SP15 (3C8): sc-81998. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing nuclear localization.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.